

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (CURRENTLY AMENDED): ~~A method of monitoring one or more substances of interest comprising:~~

~~applying a plurality of out-of-plane microneedles to a surface of an internal region, said microneedles long enough to sample one or more substances of interest at and/or just below said surface;~~

The method of claim 9 further comprising:

said microneedles comprising a plurality of dialysis ~~one or more~~ membranes on a side opposite a side applied to said surface such that said ~~membrane~~ membranes are is not placed under said surface;

~~said membrane separating in said microneedles from a dialysis material;~~
~~such that dialysis occurs outside of said internal region.~~

2. CANCELLED

3. (CURRENTLY AMENDED): The method of claim ~~2~~ or 1 further wherein:

said ~~plurality of one or more~~ dialysis membranes comprise a large total membrane surface that ~~can remain~~ remains outside of said internal region.

4-6 CANCELLED

7. (CURRENTLY AMENDED): The method of claim ~~2~~ or 1 further wherein:

a plurality of said microneedles are pre-filled with a fluid before said applying.

8. CANCELLED

9. (CURRENTLY AMENDED): A method of monitoring glucose disorders comprising:

preparing a plurality of out-of-plane microneedles for applying to the skin of a subject with a dialysis membrane remaining outside the skin;

fixing a detecting substance useful in determining glucose levels on an opposite side of said dialysis membrane from said needles;

wherein said fixing is accomplished by placing a polymer-detecting substance solution at an opposite side of said membrane after higher temperature fabrication and/or assembly steps of said microneedles have been performed.

applying said plurality of out-of-plane microneedles to the skin of a subject with a dialysis membrane remaining outside the skin; and

performing continuous glucose monitoring by testing composition of a dialysis fluid remaining outside the skin and separated from said microneedles by said dialysis membrane;

10-37 CANCELLED

38. (CURRENTLY AMENDED): ~~A method of monitoring one or more substances of interest comprising:~~ The method of claim 9 further wherein:

~~applying a plurality of out of plane microneedles to a surface of an internal region, said microneedles are long enough to prestress a region of the surface at a needle lumen;~~
and further comprising:

applying high pressure to a small local surface region through said microneedles to cause rupture of the cell matrix to open a connection between fluids inside ~~the a~~ needle lumen and bodily fluids underneath the broken skin layer; and

using said connection to sample one or more substances of interest at and/or just below said surface.

39. CANCELLED